

The 3 species described by Dr. Brauer ('Valdivia' Tiefseefische, p. 323, 1906) may be referred to 2 genera: *Aceratias* (*macrorhinus*, *indicus*), with fixed teeth and with a large nasal papilla bearing a small anterior and large posterior nostril; and *Haplophryne*, gen. nov. (*mollis*), with depressible teeth and without nasal papilla.

XXIX.—*New Species of Heterocera from Costa Rica*.—XIV.
By W. SCHAUS, F.Z.S.

Pyralidæ.

Subfamily PYRAUSTINÆ.

Neurophyseta turrialbalis, sp. n.

♀. Palpi and head white. Collar and thorax white, shaded with dark yellow. Abdomen: basal segment whitish, with round, subdorsal, fuscous-brown spots; other segments orange, with paler transverse shades and a dark segmental line on third segment. Fore wings deep orange; a basal spot and origin of lines on costa fuscous; a darker subbasal shade, marked by fuscous-brown spots in cell and below cell, and followed by a yellowish-white shade; antemedial and medial orange-brown lines, oblique on costa, angled on subcostal, the former straight, the latter inbent below vein 2, straight below submedian, the space between the lines whitish above and below submedian; an inbent crescent on discocellular, whitish, faintly edged with dark irrorations; postmedial remote, fine, dark, geminate, divided by a whitish line, outcurved from costa, obsolescent below 4, and preceded by a small whitish shade between 5 and 7; a marginal black streak from apex to vein 3. Hind wings white; an antemedial and a postmedial orange line; the termen shaded with orange, suffusing with an indistinct subterminal orange line.

Expanse 17 mm.

Hab. Turrialba, 5000 feet.

Scybalista sanctalis, sp. n.

♀. Palpi white, laterally shaded with grey. Body above dark grey; white segmental lines on abdomen; underneath whitish. Fore wings brownish grey; base slightly darker,

limited by a wavy line, dark to submedian, white and outbent on inner margin; antemedial line white, incurved between veins, inbent on inner margin; medial space shaded with whitish beyond cell, dark brownish grey below cell to inner margin; postmedial finely lunular, dark brownish grey, outwardly edged with white, straight on costa, outcurved from 7-2, twice curved below it; apical area dark shaded; a whitish marginal shade, oblique from postmedial at vein 4 to termen near tornus. Hind wings semihyaline bronze-white; a terminal fuscous line.

Expanse 19 mm.

Hab. Juan Vinas.

Lipocosmia plagalis, sp. n.

♀. Palpi white, the joints tipped with pale fawn. Head, collar, and thorax pale fawn, shaded with white; a reddish-brown streak behind vertex. Abdomen: first segment white, with subdorsal dark brown spots; second segment yellowish buff, with smaller dark subdorsal spots; third segment dark brown, other segments dark grey, all with segmental white lines. Body underneath white. Fore wings pale bistre; base white, crossed by a fine outangled bistre line, irrorated with dark brown scales on inner margin; a fine medial bistre line, angled on costa, irrorated with dark brown from subcostal to inner margin; the space below cell from medial to outer lines dark brown, slightly paler on inner margin; end of cell and space beyond to outer line semihyaline whitish buff, with a few dark scales anteriorly about discocellular; outer line fine, black-brown from vein 8, deeply outcurved and suffusing with dark medial space at vein 3; a terminal white shade above vein 6; a subterminal white line from vein 4 to tornus; cilia silvery. Hind wings: discal space to outer line semihyaline buff-white; tufts below cell brown, tipped with black; outer line fine, black-brown, outcurved and inangled at vein 2; marginal space pale bistre, the termen whitish; a terminal interrupted fine dark line, expanding into a small spot below vein 2.

Expanse 16 mm.

Hab. Juan Vinas.

Close to *L. ausonialis*, Dr.; distinguished by the dark medial space below cell.

Entephria leucinodialis, sp. n.

♂. Body white. Wings iridescent white, semihyaline. Fore wings: costal margin more thickly scaled; a brownish

streak on costa towards base and two short streaks in cell below it; a white line on discocellular, edged with pale brown; outer line fuscous, broad, and slightly oblique inwardly from costa to vein 4, finer and outcurved between 4 and 2, then slightly inbent to inner margin; the marginal space shaded with light brown, except on costa at apex. Hind wings: a brownish shade on discocellular, followed by some dark points; a subterminal fuscous line, more heavily marked on costa and inner margin, otherwise indistinct and outcurved between 4 and 2; termen more heavily scaled, silvery white.

Expanse 21 mm.

Hab. Poas.

Desmia cristinae, sp. n.

♂. Antennæ ciliated. Palpi black-brown, fringed below with silvery white. Head black. Collar fuscous, shaded with copper-colour. Thorax above and abdomen bright copper-colour; thorax below and terminal segments of abdomen black-brown; throat and fore femora silvery white. Wings dark bronze. Fore wings: costa tinged with violaceous; a copper-coloured patch at base, not extending on costal margin; a medial semihyaline white fascia from subcostal to near submedian; a similar narrower streak from vein 8 to vein 3. Hind wings: a medial narrow fascia, narrowing and terminating before inner margin; cilia fuscous, with a fine greyish line at base and tipped with white.

Expanse 21 mm.

Hab. Juan Vinas.

Named after Mrs. M. C. Keith.

Desmia grandisalis, sp. n.

♀. Palpi, head, and thorax fuscous; throat silvery white. Abdomen fuscous grey above, white underneath. Wings black-brown, markings opalescent white. Fore wings: a broad outbent fascia near middle from subcostal to submedian fold; a large oblique spot beyond cell from vein 8 to near vein 3, its outer edge straight, its inner edge rounded; cilia tipped with white near tornus. Hind wings: a large discal patch not reaching base, costa, or inner margin, the upper edge interrupted by a small black spot towards base, the outer edge straight to vein 5, then angled and straight towards inner margin; cilia tipped with white.

Expanse 36 mm.

Hab. Cachi.

Desmia flavalis, sp. n.

♂. Palpi yellow, laterally shaded with fuscous grey. Head and body deep yellow; a transverse white line on last segment anteriorly; anal tufts brown. Wings yellow. Fore wings: a fuscous basal line across costa and cell; an antemedial dark line, somewhat wavy and thickest just below median; a large spot at end of cell outlined in fuscous, extending above subcostal; the outer margin broadly purplish brown, its inner edge darkest, nearly straight from costa to vein 2, then inbent and straight to inner margin. Hind wings: a dark discal spot; a fine, irregular, dark postmedial line; the outer margin purplish brown, wide at apex, narrowing to a point at anal angle.

Expanse 32 mm.

Hab. Sixola, Tuis, Juan Vinas.

Allied to *D. chryseis*, Hmps. n.

Syngamia nebulosalis, sp. n.

♀. Palpi dark brown, fringed with white at base. Head and thorax greyish brown. Abdomen whitish buff, irrorated with brown and with white segmental lines. Wings whitish, the lines fuscous brown. Fore wings thinly clouded with brown; the base shaded with brown; a slightly curved antemedial line outwardly shaded with brown; a line on discocellular; a medial line from vein 2 to inner margin; postmedial slightly incurved from costa to vein 6, and from 6 to 2, where it is slightly upbent towards discocellular; outer margin broadly fuscous brown, expanding below vein 2 to inner margin; cilia whitish below apex and above tornus, with an interrupted basal brown line. Hind wings: an antemedial shade; a spot at end of cell and medial line from below cell to inner margin; a postmedial line, expanding from vein 2 to anal angle; a subterminal broken line from a large apical space to postmedial at vein 2; a terminal line not reaching anal angle.

Expanse 21 mm.

Hab. Juan Vinas.

Trithyris pretiosalis, sp. n.

♀. Palpi dark brown. Head whitish, frons partly divided by a brown line; brown tips to scales on vertex. Collar grey-brown, with outer oblique whitish lines. Thorax white, shaded with fuscous brown behind. Abdomen: first two segments white, with lateral black spots; third segment

fuscous, fourth and fifth light reddish brown, all with segmental white lines; terminal segments whitish. Wings mostly opalescent white, thinly scaled. Fore wings: basal area to antemedial brown, except a narrow white basal space crossed by a fine dentate black line; antemedial fuscous, outwardly oblique from costa; a small black spot in cell; a reddish-brown streak on discocellular, irrorated with yellowish scales and edged in cell with a fuscous line; from just beyond middle of inner margin a sinuous fuscous line extends to near discocellular, where it is curved and downbent to submedian; inner margin from just beyond origin of this line reddish brown, irrorated with black; a broad postmedial area broadly bright reddish brown, not extending above vein 8, followed by a fine, black, wavyly dentate line from costa, slightly incurved from veins 8 to 5, then outcurved and not reaching vein 2; a large terminal fuscous-brown spot from vein 5 to apex. Hind wings: base fuscous brown, and a similar streak across cell; a postmedial fuscous streak from vein 2 to inner margin; a large apical fuscous-brown spot preceded by a sinuous wavy line, becoming terminal at vein 2; termen narrowly silvery white; cilia of both wings white, spotted with fuscous at apices.

Expanse 33 mm.

The male differs in having the anal angle of hind wings more produced and shaded with fuscous.

Expanse 30 mm.

Hab. Sixola.

Allied to *T. apicolor*, Dr., which also occurs in Costa Rica, is smaller and has the hind wings differently marked.

Bocchoris obliqualis, sp. n.

♀. Palpi dark brown, faintly fringed with buff. Head brownish grey. Body white; reddish-yellow lines on collar, patagia, and abdomen above; fuscous segmental lines on last three segments. Wings yellowish white, lines brown shaded with deep yellow; termen narrowly dark brown. Fore wings: costa deep yellow, with fine annular fuscous lines and a fuscous streak along subcostal; a subapical fuscous oblique shade; basal line straight; subbasal curved; antemedial straight, followed by a yellow spot in cell, outwardly limited by a fuscous line; a deep yellow line on discocellular edged on either side by a fuscous line, meeting behind and then slightly inbent to inner margin; postmedial fine, wavy, and irregular, inbent from vein 3 to inner margin; a subterminal dentate punctiform line from subapical shade to vein 2,

where it suffuses with a brown shade to tornus. Hind wings: a spot in cell and one on inner margin, antemedial; a medial dark line downbent on inner margin; a postmedial line, interrupted by an annular spot and downbent to tornus; a subterminal line from costa to termen at vein 2.

Expanse 16 mm.

Hab. Juan Vinas, Guapiles.

Allied to *B. adalis*, Wlk.

Bocchoris placitalis, sp. n.

♀. Palpi reddish brown, fringed with white. Head light reddish brown; a white patch on frons and a white spot between antennæ. Collar reddish brown in front, silvery white behind. Thorax reddish brown and white. Abdomen white, reddish-brown segmental lines and an angled line on each segment. Wings white, faintly silvery, lines dark brown edged with yellow. Fore wings: a broad fascia from costa at one-fifth from base to inner margin before tornus, below it, inbent basal, antemedial, and medial lines, the last from submedian; a heavier medial line straight to inner margin; above fascia a medial spot in cell containing a light brown shade; the costa medially light yellow-brown; a nearly straight line across discocellular to fascia at submedian, followed by a fine line incurved towards cell, outbent to vein 5, then wavily downbent to 2, curved and upbent to costa, suffusing with discocellular line between 5 and 7, and connected with it by streaks on 2 and 3; the postmedial space enclosed by the curved line, crossed by a dark line on vein 4, below vein 5, and an oblique line above 5; an incurved subterminal line from apex to termen at vein 4 and a wavily incurved line from 4 to fascia before tornus; a terminal line; cilia brown tipped with buff, and some fuscous spots. Hind wings: inner margin with a short streak at base, and short medial and postmedial lines; from base below cell and vein 2 a broad clear white space to termen; a medial line across cell; a line across end of cell, angled and downbent, crossed by a short line, angled again at vein 2, and outbent to irregular marginal brown space, which contains two large round white spots, the spot towards vein 2 not completely edged with brown.

Expanse 20 mm.

Hab. Juan Vinas.

Pilocrocis apellalis, sp. n.

♂. Palpi fuscous grey. Head brown, with white lines near eyes. Collar, thorax in front, and patagia orange; thorax behind fuscous, with a medial orange line. Abdomen black above, underneath white, with last two segments and anal hairs orange. Wings: the veins broadly purple-black; the interspaces bluish grey, opalescent; cilia black.

Expanse 40 mm.

Hab. Avangarez.

Pilocrocis mapetalis, sp. n.

♂. Palpi brown above, buff below. Head, body, and wings orange. Fore wings: outer margins with veins broadly black, interspaces whitish, widest on costa, narrowest at vein 3. Hind wings: outer margin similar, the interspaces only whitish on termen; the streaks shorter towards anal angle.

Expanse 35 mm.

Hab. Tuis, Sixola.

Pilocrocis modestalis, sp. n.

♂. Palpi fuscous grey, each joint shaded with buff. Body fuscous brown above, white underneath. Wings silky brown, the lines fuscous. Fore wings: costa shaded with fuscous grey; antemedial line from subcostal somewhat outbent; a black point in cell and small spot on discocellular; post-medial straight from costa to below vein 3, inbent to below discocellular at vein 2, and straight to inner margin. Hind wings: a discal streak, postmedially inbent below vein 3. Underneath paler, shaded with white at base; markings similar, but more distinct.

Expanse 29 mm.

Hab. Sixola.

Pilocrocis musalis, sp. n.

♂. Palpi fuscous brown, white at base; a lateral buff spot on second joint. Body fuscous brown above, underneath buff-white; brown spots on fore tarsi. Fore wings brown, tinged with purplish; costal margin fuscous; four semi-hyaline whitish spots beyond cell from veins 3-7, and a small spot in cell, all rather indistinct. Hind wings silky

brown, thinly scaled near cell, between veins 2 and 4, and above 5.

Expanse 30 mm.

Hab. Sixola, Banana River.

Pilocrocis sixolalis, sp. n.

♂. Body and wings dull greyish brown; anal hairs whitish buff; wings slightly iridescent, the termen broadly dark brown except at apex of fore wing. Fore wings: an antemedial fuscous point in cell and dentate dark line from median to inner margin; an oblique black spot at end of cell; a smaller spot below vein 2; a faint streak on fold and small spot on inner margin; an outer row of dark points between veins from 8-2. Hind wings: a dark shade on upper part of discocellular; a faint outer line of spots, inset below vein 2.

Expanse 34 mm.

Hab. Juan Vinas, Sixola.

Near *P. liberalis*, Gn.

Pilocrocis tortuosalis, sp. n.

♂. Body buff-brown; abdomen dorsally irrorated with fuscous grey. Wings whitish buff, the outer margins broadly and lines dark brown. Fore wings: a punctiform basal line; antemedial outwardly oblique from costa, straighter below cell, followed by a small spot in cell; a large quadrate spot at end of cell, divided by a pale line on discocellular; postmedial fuscous brown, finely lunular, slightly outbent from costa to submedian fold, upbent to cell, curved inwardly and outbent, forming a horseshoe, straight from submedian to inner margin; from vein 4 to fold the postmedial suffuses with the brown terminal space; an interrupted terminal whitish-buff line. Hind wings: a fuscous shade at end of cell, crossed by a medial fuscous line; the postmedial straight from costa, outset and finely lunular from veins 5-2; the marginal brown space narrowing towards anal angle.

Expanse 34 mm.

Hab. Juan Vinas, Esperanza.

Ulopeza syleptalis, sp. n.

♀. Palpi brownish, fringed with white at base. Head white; collar white, shaded in front with orange. Thorax white; patagia edged with orange. Abdomen dorsally

orange-brown on basal half, greyish brown terminally, with white segmental lines, broadest at base. Fore wings white; below vein 5 from cell to termen dark lilacine brown, the termen above 5 only narrowly so; veins on white portion orange, also an oblique line at base from cell to antemedial on inner margin; transverse lines dark lilacine brown; a lilacine brown streak above subcostal to beyond cell, extreme costa lighter brown; a white streak postmedially; a sub-basal line to submedian; an antemedial line oblique across cell, then straight to inner margin; an oblique medial spot in cell and a medial streak on submedian fold; a spot at end of cell, bifurcating from vein 6 to subcostal; a subterminal irregular line from vein 5 to costa. Hind wings thinly scaled, whitish, the outer margin shaded with fuscous.

Expanse 26 mm.

Hab. Juan Vinas, Tuis.

Acridura caerulealis, sp. n.

♂. Palpi white on basal half, fuscous terminally. Body above black shot with dark blue; underneath silvery white; legs streaked with fuscous. Fore wings dark blue on basal half and along costa, otherwise dark purplish; cilia dark brown, tipped with white. Hind wings dark violaceous blue; inner margin broadly dark brown. Underneath dark silky brown; hind wings with tuft of scales on vein 2 at termen.

Expanse 25 mm.

Hab. Juan Vinas.

Acridura pulchralis, sp. n.

♂. Antennæ black, with long tufts of hairs along basal third. Palpi black. Head and collar black, with metallic gloss. Thorax black; a central silvery-grey shade; below dark brown, a crimson lateral spot near head. Abdomen above deep yellow, shaded with crimson on basal half, terminally silky black; anal hairs whitish buff; underneath crimson, the last two segments black. Fore wings violaceous black; termen bronze-brown; inner margin coal-black; cilia black or grey according to light. Hind wings semihyaline through and below cell; the margins broadly dark violaceous brown.

Expanse 25 mm.

Hab. Juan Vinas.

Phryganodes albiciliaris, sp. n.

♂. Palpi, head, neck, pectus, legs, abdomen below, and terminal segments above orange; a fuscous ring at base of fore tarsi. Body otherwise and wings fuscous tinged with grey; cilia white. Fore wings: the basal half shot with dull blue.

Expanse 48 mm.

Hab. Tuis, Juan Vinas.

Phryganodes argentigularis, sp. n.

♂. Palpi fawn-colour, the base and throat silvery white. Body fawn-colour, tinged with grey on thorax and base of abdomen; anal tufts silvery white, shaded dorsally with brown; underneath white. Fore and mid femora shaded with brown-grey; tarsi, mid and hind tibiæ silvery white; fore tibia broadly ringed with fuscous; hind tibia with long black tufts. Wings grey-brown; cilia with a buff line at base. Fore wings: traces of an outbent antemedial line; a black point in cell; a small black spot on discocellular; outer line fine, almost punctiform, outcurved, and with a large black spot on submedian fold. Hind wings: a small black discal spot; postmedial line curved, inbent at vein 2. Wings below rather greyer, the markings as on upper side, but rather finer.

Expanse 32 mm.

Hab. Esperanza, Sixola.

Phryganodes anxiferalis, sp. n.

♂. Palpi dull grey-brown, fringed with buff at base. Body ochreous brown; fine white segmental lines on last segments; anal tufts black, with a central buff line. Legs buff; a fuscous ring on fore tibia. Wings ochreous brown, the outer margin broadly suffused with fuscous except at apex of fore wings; lines black. Fore wings: an antemedial curved line; a point in cell and a larger but small black spot on discocellular; postmedial remote, finely lunular, and nearly straight to below vein 3, inbent towards cell above 2 and wavy to inner margin in a line with discocellular. Hind wings: a discal streak; postmedial line outcurved beyond cell; cilia whitish buff. Wings below paler, with only a faint trace of postmedial line.

Expanse 32 mm.

Hab. Sixola.

Phryganodes clementalis, sp. n.

♂. Palpi fuscous, fringed on basal half with whitish. Body fuscous brown above, whitish buff underneath. Thorax below with large fan-shaped tufts of silvery-grey scales. Wings very dark silky brown. Fore wings: outer margin oblique; costa fuscous brown; a fuscous shade on discocellular; very faint traces of a broad antemedial and post-medial darker shade; cilia fuscous grey. Hind wings triangular, slightly produced at anal angle, the apex extending beyond torus of fore wing; cilia tipped with whitish grey on anal half.

Expanse 23 mm.

Hab. Guapiles.

Phryganodes evanidalis, sp. n.

♂. Palpi, head, and collar yellow. Thorax and abdomen greyish; a faint dark dorsal line. Wings silky grey, the veins finely brown.

Expanse 40 mm.

Hab. Tuis, Sixola.

Near *P. eucharisalis*, Wlk.

Phryganodes gazalis, sp. n.

♂. Palpi orange, shaded with fuscous above. Head and thorax fuscous brown. Abdomen orange; two basal segments dorsally fuscous shaded. Thorax below and legs orange. Wings fuscous brown, the lines black. Fore wings: antemedial line slightly outcurved; postmedial slightly inbent; medial space paler in cell, the costal margin above it pale buff; a fine dark streak on discocellular; cilia white below vein 3, black above it. Hind wings: post-medial line very indistinct; cilia white except at anal angle and on inner margin, where it is black.

Expanse 34 mm.

Hab. Juan Vinas, Tuis.

Phryganodes latiapicalis, sp. n.

♂. Palpi fuscous brown. Head fuscous grey; vertex silvery white. Body above blue-black, underneath white. Legs outwardly fuscous grey. Fore wings: outer margin rounded, giving a broad appearance to apical area, black, somewhat hyaline in cell, beyond, below it, and between veins 2 and 3; the base and costa tinged with dark green,

the inner margin with dark blue, the outer third with violaceous. Hind wings semihyaline, violaceous fuscous; veins black; outer margin more heavily scaled.

♀. Vertex silvery grey. Wings more uniformly tinged with violaceous, with traces of green and blue at base only.

Expanse, ♂ 38 mm., ♀ 36 mm.

Hab. Juan Vinas.

Phryganodes obliqualis, sp. n.

♂. Palpi buff-brown. Head and thorax white, shaded with grey. Abdomen white; a broad, dorsal, fuscous-grey line. Wings white. Fore wings: the costal margin greyish brown; a dark streak on discocellular; a broad indistinct fuscous shade below vein 2 from cell to tornus; a terminal fuscous streak at apex below vein 8.

Expanse 25 mm.

Hab. Sixola.

Phryganodes patricialis, sp. n.

♂. Palpi dull greyish brown, fringed with white at base; throat silvery white. Head and collar buff; a brownish spot on frons and medial shade on collar. Thorax brownish; a medial dark line; patagia yellow. Abdomen above yellowish buff; a broad, dorsal, fuscous-grey line. Fore wings thinly scaled, pale yellow; costa shaded with bistre, darkest at base; a fuscous basal spot on costa and subbasal spot in cell; an antemedial, wavy, oblique, fuscous line, followed by a small annular spot in cell; the submedian brownish and a short line medially below it to antemedial; two dark lines at end of cell, coalescing at vein 2 and connected with postmedial by a single line; the postmedial remote on costa, inwardly oblique to vein 5, slightly outcurved and lunular to 2, which it follows to below end of cell, and is then wavy to inner margin; terminal space from postmedial more heavily scaled, purplish brown, enclosing a small yellow spot close to postmedial below vein 2 and one on inner margin. Hind wings semihyaline pale yellow, shaded with brown at apex; a postmedial dark lunular line from costa to vein 2, where it is inset and downwardly oblique.

Expanse 34 mm.

Hab. Sixola, Banana River.

Phryganodes rufalis, sp. n.

♂. Palpi fuscous brown, shaded with dull red laterally. Head, collar, and thorax dull red; a small white tuft behind eyes. Abdomen above slightly bright red. Body below fuscous; tarsi, mid and hind tibiae white. Wings purplish red, with semihyaline white spots, partly edged with black. Fore wings: small antemedial spots in and below cell; a large spot beyond middle of cell and one below it, both irregular, above the latter a small oblique streak between veins 2 and 3; a large postmedial spot from veins 5-7 and minute spots between 3 and 4 and 4 and 5, also one between 7 and 8; cilia fuscous, tipped with white from tornus to below 3 and spotted with white towards apex. Hind wings: a small spot in cell and a medial streak from cell, tapering towards inner margin, which it does not reach; a large spot beyond cell from vein 2 to just above 6; cilia tipped with white beyond anal angle and near apex; the costa fuscous. Wings below fuscous, shaded with dull reddish brown.

Expanse 40 mm.

Hab. Juan Vinas, Sixola, Tuis, Avangarez.

Phryganodes seminitidulis, sp. n.

♂. Palpi, head, neck, pectus, legs, and abdomen below deep yellow; mid and hind tarsi fuscous grey. Body and wings fuscous grey. Fore wings tinged with blue along costa and at base; a blue streak in cell and one below it; a large opalescent white spot beyond cell. Hind wings: a large opalescent white spot from base, extending to near outer margin, leaving inner margin broadly fuscous grey.

Expanse, ♂ 37 mm., ♀ 44 mm.

Hab. Guapiles, Tuis, Juan Vinas.

Allied to *P. hypoxantha*, Dogn., which has the white on hind wings extending to inner margin.

Nacoleia ceruleonigra, sp. n.

♂. Antennæ with ridge of hairs above on basal third. Palpi dark brown, fringed below with white. Body and wings above black, shaded with dark blue; underneath silky slate-black; legs brownish grey; throat white.

Expanse 16 mm.

Hab. Juan Vinas, Carillo.

Nacoleia esperanzalis, sp. n.

♀. Body and wings buff-brown; a transverse black line on abdomen terminally; lines fuscous brown. Fore wings: a subbasal line; antemedial slightly outcurved; a small annular spot in cell; an oblique spot on discocellular, containing a buff streak; postmedial finely lunular, dentate, slightly outbent between veins 6 and 3, then inbent to near cell and downbent to inner margin; terminal small spots between the veins; cilia dark-spotted. Hind wings: antemedial line slightly angled at lower angle of cell and on inner margin; postmedial line from costa to vein 2 nearly straight.

Expanse 22 mm.

Hab. Esperanza.

Nacoleia zethealis, sp. n.

♀. Palpi and frons greyish buff; body white. Wings white, the lines grey-brown. Fore wings: basal third of costa and lines greyish brown; antemedial line slightly curved on costa, then straight to inner margin; a point in cell and streak on discocellular; outer line sinuous, perpendicular, slightly produced from below vein 5 to 2, upbent to below discocellular, then downbent to inner margin; termen fuscous from above tornus, expanding somewhat to vein 8. Hind wings: antemedial line of fore wing continued straight across hind wing and angled above anal angle; postmedial line straight from costa to vein 3, where it is indistinctly upbent, suffusing with antemedial line; termen narrowly shaded with fuscous.

Expanse 27 mm.

Hab. Carillo.

Sylepta dialis, sp. n.

♂. Palpi fuscous brown. Head yellowish buff. Collar, thorax, and abdomen deep yellow. Wings deep yellow, the outer margins broadly brown, on which the veins are paler; a terminal fuscous line, interrupted by veins and outwardly finely edged with yellow; cilia fuscous, tipped with white. Fore wings: an irregular dark basal line; an antemedial fuscous line, obliquely curved to submedian, somewhat incurved below it; a black spot at end of cell; postmedial rather broad, fuscous, somewhat outcurved from veins 7-2, its outer edge faintly lunular, inwardly oblique from 2 to inner margin and from costa to vein 7. Hind wings: the postmedial slightly

sinuous. On both wings the postmedial separates the yellow from the brown terminal space.

Expanse 34 mm.

Hab. Sixola.

Sylepta excelsalis, sp. n.

♂. Palpi white, shaded below with greyish brown. Head and thorax white; some pale brownish shadings on frons and collar and similar irrorations on thorax. Abdomen on basal segments dorsally brown, with sublateral white lines, interrupted by segmental white lines; terminal segments white. Body below white, the legs partly and faintly shaded with greyish brown. Wings greyish brown, shot with lilacine; a whitish subterminal line, interrupted on fore wing by veins; a terminal dark line, interrupted by white spots, confluent on hind wings. Fore wings: the base broadly white, shaded with yellow, and crossed by a subbasal greyish shade, widest on inner margin; a similar basal spot followed by a white point on median; costa greyish; a small semihyaline space at end and beyond cell, interrupted by small discocellular spot, containing a hyaline point. Hind wings: base white, extending below cell and along inner margin. Underside whitish, showing indistinctly the markings of upper surface.

Expanse 25 mm.

Hab. Sixola, Juan Vinas, Tuis, Guapiles.

Allied to *S. cerealis*, Wlk.

Sylepta falsalis, sp. n.

♂. Body and wings above buff-grey, somewhat iridescent. Fore wings: basal half in and below cell tinged with bluish lilacine, the postmedial area faintly tinged with purplish; a fuscous spot in cell and streak on discocellular; postmedial fuscous, indistinct, outcurved from veins 8-2, then angled and marked by a fuscous spot on fold. Hind wings: costa shaded with whitish; faint traces of a postmedial line. Wings below whitish; a fuscous shade on discocellular of fore wing.

Expanse 28 mm.

Hab. Juan Vinas.

Lygropia muralis, sp. n.

♀. Body and wings above silky greyish brown. Body underneath whitish. Fore wings: lines fuscous, rather coarse, the antemedial nearly straight, the postmedial outcurved beyond cell, straight below vein 3; a slightly paler

streak on discocellular, edged with fuscous; terminal fuscous spots, partly geminate. Hind wings: faint traces of a post-medial line; terminal dark spots as on fore wing. Underneath the costa of hind wings whitish; traces of a postmedial line.

Expanse 17 mm.

Hab. Avangarez.

Glyphodes costaricalis, sp. n.

♂. Palpi dark brown, fringed with white at base. Head and collar dark brown; a whitish line across vertex in front; tegulæ tipped with whitish. Thorax brown, crossed by a violaceous fuscous shade. Abdomen whitish, thickly irrorated with brown; lateral segmental black lines; anal hairs mostly fuscous. Fore wings: the costal margin dull brown, otherwise rich dark brown, somewhat thinly scaled from below end of cell to inner margin; a subbasal black spot below cell, followed by an oblique pale shade; a curved black streak on discocellular; two small opalescent white spots subterminally between veins 5 and 7, and an incurved blackish line below them to inner margin; terminal black shades between the veins; cilia mottled grey and fuscous. Hind wings opalescent, lilacine white, faintly shaded with brown; a black point at end of cell; the outer margin broadly, the inner margin narrowly brown; a black terminal line.

Expanse, ♂ 36, ♀ 42 mm.

Hab. Juan Vinas, Poas.

Glyphodes fuligalis, sp. n.

♂. Palpi fuscous, fringed at base with white. Head orange. Tegulæ fuscous brown, with orange spots. Thorax and abdomen fuscous brown above, the anal hairs mostly light brown; underneath white; legs white, streaked with fuscous. Fore wings brown-black; a large oval, postmedial, oblique white spot, thickly irrorated with brown-black. Hind wings black; a large elongated white space from base, extending above, below, and beyond cell; a fine white streak along inner margin. Underneath black, the spots as above but clear white; a white streak below cell on fore wings; a broad white streak along inner margin on hind wings.

Expanse 36 mm.

Hab. Juan Vinas.

Allied to *G. auricollis*, Snell.

Glyphodes nigricilialis, sp. n.

Palpi fuscous, fringed at base with white. Body fuscous brown above, white underneath. Fore wings dark brown, tinged with purple; an opalescent semihyaline white space from inner margin near base to beyond middle, oblique to beyond cell, narrowing and forming a line only from above vein 5 to near 8, its outer edge finely wavy. Hind wings semihyaline, opalescent white; outer margin broadly dark brown, narrowing to a point at tornus; cilia entirely black.

Expanse 31 mm.

Hab. Tuis, Guapiles.

Nearest *G. lucidalis*, Hbn., from which it can be distinguished by its larger size and entirely black cilia.

Glyphodes novicialis, sp. n.

♂. Palpi fuscous brown, fringed at base with white. Head, collar, and thorax purplish brown. Abdomen white; last two segments dorsally dark grey; anal tufts laterally pale reddish brown. Fore wings deep silky purple; an opalescent semihyaline white space along inner margin from near base to beyond middle, its anterior edge extending obliquely to beyond cell near vein 5, its outer edge lunular, inbent at vein 2. Hind wings semihyaline opalescent white; the apex broadly purplish, narrowing to a point at vein 3.

Expanse 25 mm.

Hab. Guapiles.

Leucinodes xylopastalis, sp. n.

Palpi, head, and thorax white, shaded with greyish buff. Abdomen olive-buff, with darker shadings posteriorly on each segment; a transverse white line at base and a geminate dorsal white line on last five segments. Wings semihyaline, except markings, greenish white. Fore wings: costal margin creamy white, shaded with olive-buff at base; inner margin white, irrorated with olive-buff; a fine outcurved antemedial dark line; a cluster of pale scales in middle of cell and a similar cluster below vein 2; a fine fuscous line on discocellular, broadly bordered outwardly with creamy buff; veins beyond cell irrorated with black; an outcurved subterminal black-brown line, obliquely incurved from vein 2, followed by an ochreous-buff shade; termen narrowly white, with some dark brown spots. Hind wings: a fuscous-edged olive-buff line on discocellular;

subterminal line upbent below vein 3 towards discocellular; outer margin as on fore wing.

Expanse 31 mm.

Hab. Turrialba, 6000 feet.

Crocilolomia limatalis, sp. n.

♂. Palpi dark grey, with two white rings on second joint. Head, collar, and thorax brown; white lateral lines on frons and tegulæ; patagia partly white-edged. Abdomen grey-brown. Fore wings silky brown, tinged with dull red; a fine darker antemedial line, somewhat lunular and preceded by a darker shade; a fine darker postmedial line, slightly outcurved below costa and followed by an oblique white line on costa; an interrupted terminal line partly shaded with black, terminating in a small white spot and black point at apex; cilia fuscous or luteous, according to light, more clearly luteous at tornus. Hind wings silky brown, the veins darker; outer half of cilia whitish.

Expanse 31 mm.

Hab. Juan Vinas.

Larger than *C. palindialis*, Gn., and of a different colour.

Sameodes fortunata, sp. n.

Palpi brown. Head white. Collar pale reddish brown. Thorax and patagia silvery grey. Abdomen above dark brown except basal and last segments, which are buff. Body underneath buff-white. Fore wings whitish; basal third of costa and cell shaded with brown; yellow-buff shades basally below cell; a broad antemedial, irregular, fuscous shade; a dark brown medial line obliquely wavy from costa, outangled on fold, inangled on inner margin, followed in cell by a fuscous shade and yellow-buff spot, outwardly limited by a dark curved line; a dark line from cell along vein 2 for a short distance, then wavy to inner margin; across discocellular a yellow-buff, incurved crescent, finely edged with brown, the points semi-connected by small brown and yellowish spots beyond cell, which form part of a postmedial punctiform line; a broad subapical fuscous-brown shade from costa to marginal line at vein 5, the latter also fuscous brown and not reaching apex, both edged inwardly and along termen with yellow-buff; the marginal line expands at tornus; the veins partly shaded with yellow-buff. Hind wings: the marginal line broader from below costa, upbent along inner margin, expanding medially, and coalescing with

a dark spot below vein 2; a fine downbent postmedial line; yellow shadings along marginal line, which is irrorated with silvery-grey scales; a fine terminal dark line and points on both wings; cilia yellow.

Expanse 22 mm.

Hab. Juan Vinas.

Thliptoceras neotropicalis, sp. n.

Palpi and head grey-brown. Thorax and abdomen above fuscous brown, underneath whitish buff. Fore wings fuscous brown; a slightly outcurved antemedial black line, inwardly heavily edged with yellowish buff; costal margin medially yellowish buff, suffusing with a small pale spot in cell, and a larger spot adjoining postmedial, the latter being fuscous, suffusing with dark portion of wing and indicated by a narrow yellowish-buff shade along its outer edge, and is inbent from veins 5-2, below 2 slightly outbent; cilia fuscous between veins 2 and 4, otherwise yellowish buff with dark points at veins. Hind wings fuscous grey-brown. Underneath dark silky grey, with the lines indicated by fuscous shadings which extend on to hind wings; fore wing with a pale spot in cell and one beyond it; the costa buff at apex.

Expanse 18 mm.

Hab. Carillo.

Azochis curvilinealis, sp. n.

♂. Palpi coal-black, fringed with white below. Frons dark brown, edged with coal-black, vertex white. Collar opalescent white, with a large medial fuscous-grey spot, also opalescent. Thorax white; a black spot behind; patagia opalescent white. Abdomen white; third and fourth segments dorsally coal-black; transverse black lines on last two segments. Wings semihyaline opalescent white; termen narrowly dull white; cilia yellowish, tipped with white. Fore wings: costal, inner margin, and veins creamy white, except where crossed by black markings; a minute basal spot on costa; a large subbasal spot on costa and one on inner margin; an antemedial line, outwardly expanding below cell; a medial spot in cell; a large oblique spot on discocellular; streaks beyond cell between veins 3 and 4 and 4 and 5, and a large inbent spot from 3 tapering to inner margin; an oblique curved postmedial line from costa to vein 3; a marginal spot from tornus to near vein 3; an elongated spot from above 3 to vein 6, where it is widest; points above 6 and 7. Hind wings: a medial streak across

cell; a small postmedial spot between 5 and 6; a postmedial streak on inner margin; marginal streaks near anal angle and across vein 5.

Expanse 31 mm.

Hab. Tuis.

Azochis graphialis, sp. n.

♂. Palpi black, fringed with white. Head whitish; collar yellowish bistre, with a large medial fuscous-brown spot. Thorax fuscous brown; patagia whitish, with a small black spot. Abdomen pale bistre, with segmental white lines and dorsal black transverse spots on alternate segments. Fore wings pale bistre, thinly scaled; a subbasal black point in cell; a slightly inbent antemedial black line, faintly edged with reddish; a black point in middle of cell; postmedial line black, faintly inbent, thickening near submedian, with a spot below it; another line starting from same point on costa is outbent to near submedian, and preceded on vein 2 by a black spot, the narrow space between the lines shaded with reddish ochre across discocellular; a third black line from costa just beyond postmedial, outbent to below vein 5, then curved, inbent, finer, and interrupted to previous line above submedian, the two lines enclosing an almost triangular semihyaline whitish space; the termen narrowly white; a black point at apex; a marginal black spot above vein 6 and an oblique larger spot below it extending on cilia; a black point near tornus. Hind wings semihyaline white, the inner and outer margins pale bistre; a black point on discocellular and a larger spot at angle where joined by veins 3 to 5, this last continued as a coarse line to near inner margin above angle; a fine postmedial line from vein 3 to fold, down-curved and bent back to near costa as a subterminal line; termen narrowly white; an interrupted fine black terminal line, thickened from vein 3 to fold.

Expanse 28 mm.

Hab. Guapiles, Sitio, Juan Vinas.

Azochis oncalis, sp. n.

♂. Palpi coal-black, fringed below with white. Frons coal-black. Vertex white. Tegulae opalescent white, dorsally and outwardly edged with black. Thorax white; a small black spot behind. Abdomen white; a small reddish-brown spot dorsally on first segment and similar subdorsal shades on second segment; segments 3-5 dorsally black, edged in front

and behind with reddish brown; black transverse streaks on last two segments, also edged with reddish brown. Wings opalescent white, semihyaline; termen white; cilia yellowish, tipped with white. Fore wings: veins opaque, white; some pale reddish-brown streaks on costa and along vein 8; spots black, partly edged with pale reddish brown; a basal spot on costa; a subbasal small spot in cell and a large spot on inner margin; an antemedial outbent line, angled and thicker below cell; a medial spot in cell; a larger spot across discocellular from above subcostal; a round postmedial spot from vein 5 to above 6, and a line above it across costa; a large spot from vein 3 to inner margin; marginal streaks between 6 and 8; a large spot from 6, tapering to below 4, and a small spot at tornus. Hind wings: a spot in cell; small postmedial spots beyond cell and on inner margin; subterminal points above and below vein 4; marginal spots from vein 4 to apex.

Expanse, ♂ 32 mm., ♀ 39 mm.

Hab. Juan Vinas, Sitio.

Rhectosomia compositalis, sp. n.

♂. Palpi light brown, fringed with white at base. Head and collar pale olive-brown. Patagia whitish, streaked with olive-brown. Abdomen above dark grey on basal half, terminal half olive-brown, dorsally paler. Fore wings: basal third of costa and outer half of inner margin pale buff; costa medially white, also a large postmedial white spot and smaller spot beyond; spaces between spots on costa and cell olive-brown; a longitudinal black streak at end of cell to buff crescent on discocellular, which is followed by a black line, and some mottled dark and white scaling; a basal white streak below cell; base of inner margin pale buff; a broad black antemedial shade from median to inner margin, shaded with lilacine and followed by an inbent olive-brown space, shaded with white just below cell; beyond this the medial shade is darker and tinged with reddish brown between cell and fold; a fuscous streak medially along fold is angled and inbent to inner margin; on outer buff space below cell between veins 2 and 3 a long lilacine streak, its ends slightly downcurved, and edged below with light reddish brown; postmedial space from 3-8 dull olive, becoming darker on termen; some elongated, fine, black, curved lines between veins postmedially, followed by lilacine white streaks terminally, edged with dark brown. Hind wings white; a terminal

brown spot at vein 2 and some brownish clusters from it to anal angle.

Expanse 30 mm.

Hab. Poas, Turrialba.

Pionea contentalis, sp. n.

♂. Palpi long, light reddish brown, fringed below with white. Body and wings luteous, the latter thinly scaled. Fore wings: a fine, dark, outbent antemedial line, hardly perceptible; a faint point in cell and streak on discocellular; postmedial fine, indistinct, outbent on costa, curved and inbent to below discocellular, then wavy to inner margin, slightly outangled on submedian fold; termen darker shaded. Hind wings: costa whitish; postmedial line very fine, inset at vein 2.

Expanse 14 mm.

Hab. Juan Vinas, Sixola.

Very similar to *P. eupalusalis*, Wlk., and is chiefly distinguished from that species by the longer palpi and more acute apex of fore wing.

Pionea montanalis, sp. n.

♂. Palpi fuscous brown, fringed with white at base. Frons light brown; vertex whitish. Thorax brown, laterally streaked with white. Abdomen above fuscous brown; subdorsal white streaks at base. Fore wings brown, with darker irrorations; a round whitish dark-edged spot in middle of cell; a curved whitish line on discocellular, more broadly edged with dark brown; a small black postmedial spot on costa. Hind wings white; a terminal brownish line, somewhat interrupted by veins; cilia whitish, with a dark line near base; a minute dark spot on inner margin above anal angle.

Expanse 21 mm.

Hab. Poas.

Pionea poasalis, sp. n.

♂. Palpi dark grey. Head, collar, and thorax dark grey. Abdomen fuscous above, whitish laterally and underneath, with sublateral black spots. Legs whitish grey, thinly irrorated with black. Fore wings greyish buff, thinly scaled below cell, and with a few scattered black irrorations; a large fuscous shade in middle of cell, extending above subcostal; a similar shade at end of cell, with a white point at lower angle

of discocellular; an indistinct, finely dentate, outer line remote from cell, followed by a vague subterminal darker shade; terminal black points. Hind wings thinly scaled, white; an indistinct fine postmedial line, termen faintly tinged with light brown; some terminal dark points, better defined on underside.

Expanse 25 mm.

Hab. Poas.

Pyrausta entephrialis, sp. n.

♂. Palpi fuscous brown, fringed below with white. Body silky buff-white; a dorsal brownish line on abdomen. Wings whitish. Fore wings tinged and irrorated with light brown; costa shaded with dark olive-brown; an antemedial brown line, slightly incurved below submedian, and followed in cell by a dark point; a fuscous-brown streak on discocellular; a postmedial brown line, finely dentate, and deeply outcurved to vein 3, then inbent and wavy to inner margin; a terminal dark line interrupted by veins. Hind wings: some indistinct brown irrorations at end of cell; a fine outcurved postmedial brown line; a faint brownish marginal shade on costal half suffusing with terminal line at apex.

Expanse 25 mm.

Hab. Juan Vinas.

Pyrausta tuisalis, sp. n.

♂. Palpi brown, fringed with silvery white below. Head greyish buff. Collar and thorax buff-yellow, outwardly shaded with brown. Abdomen yellow-brown, with whitish segmental lines. Fore wings buff-yellow, the costa and apical area shaded with brown; a fine brown, outbent, wavy, antemedial line; a dark point in cell; an oblique line on discocellular; postmedial fine, brown, lunular, and deeply outcurved from veins 8-2, then slightly oblique to inner margin, preceded by a fuscous shade between 2 and 5, and some darker shading on inner margin. Hind wings thinly scaled, yellow tinged with brown; a small dark discal spot; a dark, finely dentate, postmedial line.

Expanse 32 mm.

♀. Wings brighter yellow, with the dark shade between veins 2 and 5 more pronounced.

Expanse 32 mm.

Hab. Tuis, Esperanza, Juan Vinas.

Comes next to *P. flavidensalis*, Warr.